

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-107 (Canceled)

108. (Currently Amended) A method for determining whether a first test protein interacts with a second test protein, said method comprising:

- a) providing in a cell:
  - i) a counterselectable reporter gene operably linked to a ~~first~~ DNA binding protein recognition site or a selectable/ counterselectable reporter gene operably linked to a ~~first~~ DNA binding protein recognition site;
  - ii) a first fusion gene ~~which~~ that expresses a first hybrid protein, said first hybrid protein comprising a first test protein covalently bonded to a DNA binding moiety ~~which~~ that specifically binds to said DNA binding protein recognition site;
  - iii) a second fusion gene ~~which~~ that expresses a second hybrid protein, said second hybrid protein comprising a second test protein covalently bonded to a gene activating moiety; [[and]]
- b) detecting expression of said reporter gene as a measure of the ability of said first test protein to interact with said second test protein;
- c) isolating a cell that expresses said reporter gene; and
- d) amplifying said first fusion gene or said second fusion gene.

109-148 (Canceled)

149. (New) The method of claim 108, further comprising:

- e) sequencing said first fusion gene or said second fusion gene.

150. (New) A method for determining whether a first test protein interacts with a second test protein, said method comprising:

- a) providing in a cell:
  - i) a first counterselectable reporter gene operably linked to a first DNA binding protein recognition site or a first selectable/ counterselectable reporter gene operably linked to a first DNA binding protein recognition site;
  - ii) a second counterselectable reporter gene operably linked to a second DNA binding protein recognition site or a second selectable/ counterselectable reporter gene operably linked to a second DNA binding protein recognition site, wherein said first reporter gene and said second reporter gene are identical, wherein said first reporter gene and said second reporter gene are operably linked to different promoters, and wherein the sequences of said first DNA binding protein recognition site and said second DNA binding protein recognition site are identical;
  - iii) a first fusion gene that expresses a first hybrid protein, said first hybrid protein comprising a first test protein covalently bonded to a DNA binding moiety that specifically binds to said DNA binding protein recognition site;
  - iv) a second fusion gene that expresses a second hybrid protein, said second hybrid protein comprising a second test protein covalently bonded to a gene activating moiety; and
- b) detecting expression of said first reporter gene or said second reporter gene as a measure of the ability of said first test protein to interact with said second test protein.

151. (New) A method for determining whether a first test protein interacts with a second test protein, said method comprising:

- a) providing in a cell:

- i) a first counterselectable reporter gene operably linked to a first DNA binding protein recognition site or a first selectable/ counterselectable reporter gene operably linked to a first DNA binding protein recognition site;
  - ii) a second counterselectable reporter gene operably linked to a second DNA binding protein recognition site or a second selectable/ counterselectable reporter gene operably linked to a second DNA binding protein recognition site, wherein said first reporter gene and said second reporter gene are different, wherein said first reporter gene and said second reporter gene are operably linked to different promoters, and wherein the sequences of said first DNA binding protein recognition site and said second DNA binding protein recognition site are identical;
  - iii) a first fusion gene that expresses a first hybrid protein, said first hybrid protein comprising a first test protein covalently bonded to a DNA binding moiety that specifically binds to said DNA binding protein recognition site;
  - iv) a second fusion gene that expresses a second hybrid protein, said second hybrid protein comprising a second test protein covalently bonded to a gene activating moiety; and
- b) detecting expression of said first reporter gene or said second reporter gene as a measure of the ability of said first test protein to interact with said second test protein.

152. (New) The method of claim 151, wherein said first fusion gene is located on a low copy number plasmid.

153. (New) The method of claim 151, wherein said second fusion gene is located on a low copy number plasmid.

154. (New) The method of claim 151, wherein said first fusion gene and said second fusion gene are located on low copy number plasmids.

155. (New) A method for determining whether a first test protein interacts with a second test protein, said method comprising:

- a) providing in a cell:
  - i) a first counterselectable reporter gene operably linked to a first DNA binding protein recognition site or a first selectable/ counterselectable reporter gene operably linked to a first DNA binding protein recognition site;
  - ii) a second counterselectable reporter gene operably linked to a second DNA binding protein recognition site or a second selectable/ counterselectable reporter gene operably linked to a second DNA binding protein recognition site;
  - iii) a third counterselectable reporter gene operably linked to a third DNA binding protein recognition site or a third selectable/ counterselectable reporter gene operably linked to a third DNA binding protein recognition site, wherein the sequences of said first DNA binding protein recognition site, said second DNA binding protein recognition site, and said third DNA binding protein recognition site are identical;
  - iv) a first fusion gene that expresses a first hybrid protein, said first hybrid protein comprising a first test protein covalently bonded to a DNA binding moiety that specifically binds to said DNA binding protein recognition site;
  - v) a second fusion gene that expresses a second hybrid protein, said second hybrid protein comprising a second test protein covalently bonded to a gene activating moiety; and
- b) detecting expression of said first reporter gene, said second reporter gene, or said third reporter gene as a measure of the ability of said first test protein to interact with said second test protein.

156. (New) The method of claim 155, wherein said first reporter gene, said second reporter gene, and said third reporter gene are different.

157. (New) The method of claim 155, wherein said first reporter gene, said second reporter gene, and said third reporter gene are operably linked to different promoters.

158. (New) The method of claim 155, wherein said first fusion gene is located on a low copy number plasmid.

159. (New) The method of claim 155, wherein said second fusion gene is located on a low copy number plasmid.

160. (New) The method of claim 155, wherein said first fusion gene and said second fusion gene are located on low copy number plasmids.